(19) World Intellectual Property Organization International Bureau



I DO DA GARRON EN RENER REUL COM REPORTEM DE RE EN DO DE REGIO DE REPORTEM DE REPORTEM DE REFERENCIA DE REFEREN

(43) International Publication Date 10 March 2005 (10.03.2005)

PCT

(10) International Publication Number WO 2005/021921 A3

(51) International Patent Classification7: 17/042

E21B 29/00,

(21) International Application Number:

PCT/US2004/028423

(22) International Filing Date:

1 September 2004 (01.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/499,576

2 September 2003 (02.09.2003)

- (71) Applicant (for all designated States except US): ENVEN-TURE GLOBAL TECHNOLOGY [US/US]; 16200 A Park Row, Houston, TX 77084 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): COSTA, Scott [US/US]; 25614 Broadcast Court, Katy, TX 77494 (US).
- (74) Agents: HAYNES AND BOONE LLP et al.; 901 Main Street, Suite 3100, Haynes and Boone, LLP, Dallas. Texas 75202 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AF, AG, AL, AM, AT. AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG. KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

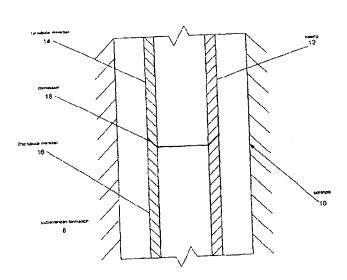
Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

with international search report

[Continued on next page]

(54) Title: A METHOD OF RADIALLY EXPANDING AND PLASTICALLY DEFORMING TUBULAR MEMBERS



(57) Abstract: A method of radially expanding and plastically deforming a tubular assembly comprising a first tubular member, a second tubular member, and a mechanical coupling for coupling the first tubular member to the second tubular member, the method comprising placing the mechanical coupling in tension; and then radially expanding and plastically deforming the mechanical coupling. It is emphasized that this abstract is provided to comply with the rules requiring an abstract to allow a searcher or other reader to quickly ascertain the subject matter of the technical disclosure; and is submitted with the understanding that it will not be used to - time the scope or meaning of the claims under 37 CFR 1.72.

WO 2005/021921 A3



- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 25 August 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

	INTERNATIONAL SEARCH REPORT	\ ·	PCT/US04/28423	
		L	,	
CLASSU	FICATION OF SUBJECT MATTER			
		e .:- and	IDC	
CĹ	: 166/277,382,207,208	incation and	110	
rding to In	: 166/277,382,207,208 ternational Patent Classification (IPC) or to both national class			
FIELDS	SEARCHED mentation searched (classification system followed by classification system) 227, 282, 207, 208, 297, 55, 55, 1, 206, 212, 216, 214, 242, 1, 242, 2	ation symbol	s)	
	The state of the s	40.0		
0.3 100			included in t	he fields searched
	documentation to the extent that	t such docum	ients are mer deco	
umentation	n searched other than minimum documentation to the extent tha			
	a base consulted during the international search (name of data between the property of the consulter of data between the consulter of the cons	sace and, who	re practicable, search	terms used)
in date	a base consulted during the international search (name of data	asc une,	•	
oce See Co	ontinuation Sheet			
	JMENTS CONSIDERED TO BE RELEVANT		2800000	Relevant to claim No.
DOC	JMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropria	te, of the rele	vant passages	1.4.6.13,17,18,20,21,25
ategory *	Citation of document, with indication, where 47 US 6,607,220 B2 (Sivley, IV) 19 August 2003 (19.08.2003),	Figures.		28.30.33-
X	US 6,607,220 B2 (Siviey, 14) 19 August 25			28 41 44 45 53 57,58,6
· 				0,61,65-70,73,76,77
Y				2,3,5,7-12,14-16,19,22-
				2,3,5,7-12,14-10,19,22
				0,42,43,45,47-52,54-
				56,59,62-
				64,71,72,74,75
				04,71,72,7
				10.14.16.10.22
	(00.04.20	01) Figures		2,3,5,7-12,14-16,19,22
	US 6,543,552 B1 (Metcalfe et al.) 08 April 2003 (08.04.2001), Figures.			24,26,27,29,31,32,39,4 0,42,43,45,47-52,54-
Y	03 0,545,555 = 1			56,59,62-
				64,71,72,74,75
				04,713,72,111,71
	1 de la continuation of Box C.		atent family annex.	i and filing date or priority
Furt	ther documents are listed in the continuation of Box C.	later o	ocument published after the	international filing date or priority pplication but cited to understand the invention
	Special categories of cited documents:	date a	nd not in contract what care	invention
	ment defining the general state of the art which is not considered to be of			
nani	icular relevance			
, p=11.	ier application or patent published on or after the international filing date	when	the document is taken	
l				ed tomos comos de
"L" docs	ument which may throw doubts on priority claim(s) or which is cited to blish the publication date of another citation or other special reason (as	cons ייץ	idered to involve an inventi-	; the claimed invention can be be step when the document is combination being
esta	blish the publication date of unconstant and of the constant and o		one or more other such doc ous to a person skilled im th	
spec	current referring to an oral disclosure, use, exhibition or other means			
"O" doc	a critical date but later than the		ament member of the sarrie	
"P" doc	current published prior to the international filing date but later than the			search report
	ority date claimed	Date of mailing	ng of the international	Deaten iska.
Date of	the actual completion of the international search	Į	ng of the international 3 JUL 2005	
I .	1 2005 (21.04.2005)	Authorized o	Harmuth	10
21 4	1 2003 (2.00)	T	Warmersky	, /
21 Apri		v.w	,	
21 Apri Name a	Mail Stop PCT, Attn: ISA/US	David Bagn	eli	U
21 Apri Name a	Mail Stop PCT, Attn: ISA/US Commissioner for Patents	David Bagn	eli	V
21 Apri Name a	Mail Stop PCT, Attn: ISA/US	David Bagn	ell o. 571-272-3600	0

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/28423

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 2004/0231839 A1 (Ellington et al.) 25 November 2004 (25.11.2004), Figures.	1-77
A,P	US 2004/0060706 A1 (Stephenson) 01 April 2004 (01.04.2004), Figures.	1-77
Α .	US 2003/0075338 A1 (Sively, IV) 24 April 2003 (24.04.2003), Figures.	1-77
Α	US 6,419,025 B1 (Lohbeck et al.) 16 July 2002 (16.07.2002), Figuers.	1-77
A,P	US 2004/0221996 A1 (Burge) 11 November 2004 (11.11.2004), Figures.	1-77
Α	US 2003/0042022 A1 (Lauritzen et al.) 06 March 2003 (06.03.2003), Figures.	1-77
Α	US 6,527,049 B2 (Metcalfe et al.) 04 March 2003 (04.03.2003), Figures.	1-77
A,P	US 6,722,443 B1 (Metcalfe) 20 April 2004 (20.04.2004), Figures.	1-77
i		